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Creative Technology – Research, Development, Practice

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Creative Technology

Technology which enables the human creativity by providing means for new types of creative products and output.

Covers Computer Music, Computer Graphics and Animation, Computer Games, Video and Audio Production.

Impact on Society

Linking Information Technology with Arts.

Novel way of engaging audiences.

Towards Artificial Creativity.

Specific Topics of the Leeds Met Centre for Creative Technology

	Research	Development	Practice
Computer Music	Aesthetics, sound creation, automatic composition	Interfaces to instruments	Compositions Performances
Computer Graphics	Mixed/augmented reality	Animation, simulation, computer games	Artistic graphics, interactive installations
Machine Intelligence	Language understanding, computer vision	Human-computer interface	Applications in learning and teaching

Collaborators

- [1] Bradshaw, Hazel
- [2] Elliott, John
- [3] Fabri, Marc
- [4] Folley, Duncan
- [5] Gangari, Rana
- [6] Guest, Elisabeth
- [7] Larkman, Brian
- [8] Ramachandran, Muthu
- [9] Renshaw, Tony
- [10] Singh, Bal
- [11] Stevens, Richard
- [12] Ward, Michael
- [13] Wilkinson, Steve

Research Focus:

Immediate interaction between human and machine.
Enabling human creativity.
Study human-computer interaction.

Principles of creativity.
Automatic extraction of creative elements in digital art and music.

"Artificial Creativity (AC)".
Make machine a creative partner to humans.

Development:

Develop and implement novel ways of human-computer interaction (hardware and software/system).

Practice:

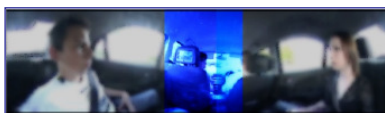
Creative practitioners: composers, performers, graphic designers, animators.

Using technological principles as an aid to creating novel art works.

"Creative Technology – An Oxymoron?"



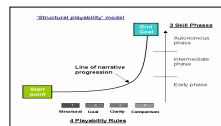
Medical Simulation [13]



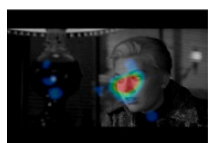
Interactive Video [5][7]



Motion Capture [4]



Structural Game Playability [1]



Eye Tracking [9][11]

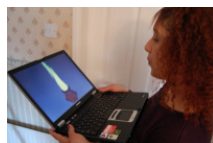


Graphics and Video

Augmented Mixed Reality



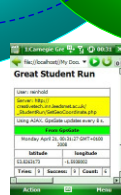
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Tangible Interfaces [10]



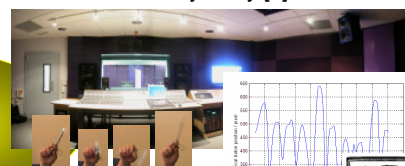
Geo-centric interfaces



Software Development [8]



Emotional Avatars [3]



Computer as Musician [12]



Computer Vision [6]



Search for Extra-Terrestrial Intelligence [2]

Creative Technology

Human-Computer Interaction Technology

Computer Games

Music and Audio

Artificial Intelligence